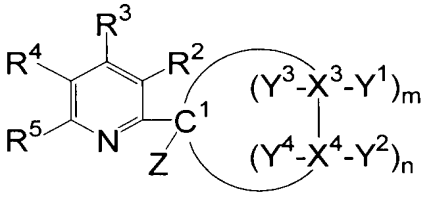
IN THE CLAIMS

Please amend the claims as follows:

Claim 1 (Currently Amended): A production method of a pyridine derivative having a substituent at the 2-position of an aromatic heterocyclic structure, which is represented by the formula (III')



(III')

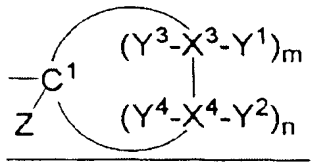
wherein

R^2, R^3, R^4 and R^5

are each a hydrogen atom, a halogen atom, an alkyl group optionally having substituent(s), an aryl group optionally having substituent(s), an alkoxyl group optionally having substituent(s), an aryloxy group optionally having substituent(s), an acyloxy group optionally having substituent(s), an alkylthio group optionally having substituent(s), an arylthio group optionally having substituent(s), an arylthio group optionally having substituent(s), a protected amino group optionally having substituent(s), a nitro group, a cyano group, an acyl group optionally having substituent(s), an alkoxycarbonyl group optionally having substituent(s), a carbamoyl group optionally having substituent(s) or a sulfonyl group optionally having substituent(s), or

R^2 and R^3, R^3 and R^4, or R^4 and R^5

optionally form, together with a carbon atom bonded thereto, a ring optionally having substituent(s),



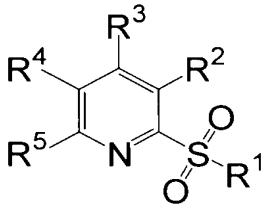
is an aromatic heterocycle optionally having substituent(s), wherein the aromatic heterocycle is selected from the group consisting of a pyridine ring, pyrimidine ring, a pyridazine ring, a pyrazine ring, a thiophene ring, a furan ring, a pyrrole ring, an imidazole ring, a pyrazole ring, a thiazole ring, an oxazole ring and an isoxazole ring; and the substituent(s) are selected from the group consisting of a halogen atom, an alkyl group optionally having substituent(s), an aryl group optionally having substituent(s), an alkoxyl group optionally having substituent(s), an aryloxy group optionally having substituent(s), an acyloxy group optionally having substituent(s), an alkylthio group optionally having substituent(s), an arylthio group optionally having substituent(s), an acylthio group optionally having substituent(s), a protected amino group optionally having substituent(s), a nitro group, a cyano group, an

acyl group optionally having substituent(s), an

alkoxycarbonyl group optionally having substituent(s), a

carbamoyl group optionally having substituent(s) and a sulfonyl group optionally having substituent(s),

which comprises reacting a 2-sulfonylpyridine derivative represented by the formula (I)

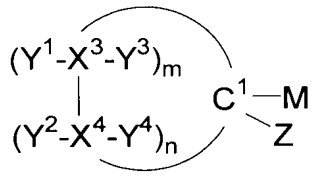


(I)

wherein

R^1 is an alkyl group optionally having substituent(s) or an aryl group optionally having substituent(s), and R^2, R^3, R^4 and R^5 are as defined above,

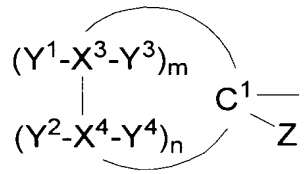
with an organometallic compound represented by the formula (II')



(I I')

wherein

M is an atom of an element belonging to Group 1, Group 2, Group 12 or Group 13 of the periodic table except a hydrogen atom, and

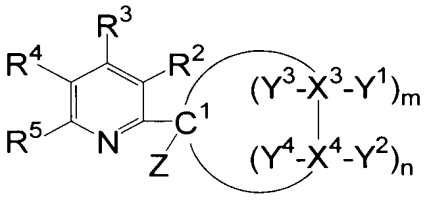


is as defined above.

Claim 2 (Previously Presented): The production method of claim 1, wherein Y^1 is bonded to Y^2, which X^4 adjacent to X^3 bonded to Y^1 has, to form a double bond, and at least

one of Y^3 bonded to said X^3 and Y^4 bonded to said X^4 is an alkyl group optionally having substituent(s).

Claim 3 (Previously Amended): A production method of a pyridine derivative having a substituent having a heterocyclic structure at the 2-position, which is represented by the formula (III)



(III')

wherein

R^2, R^3, R^4 and R^5

are each a hydrogen atom, a halogen atom, an alkyl group optionally having substituent(s), an aryl group optionally having substituent(s), an alkoxyl group optionally having substituent(s), an aryloxy group optionally having substituent(s), an acyloxy group optionally having substituent(s), an alkylthio group optionally having substituent(s), an arylthio group optionally having substituent(s), an acylthio group optionally having substituent(s), a protected amino group optionally having substituent(s), a nitro group, a cyano group, an acyl group optionally having substituent(s), an alkoxycarbonyl group optionally having substituent(s), a carbamoyl group optionally having substituent(s) or a sulfonyl group optionally having substituent(s), or

R^2 and R^3, R^3 and R^4, or R^4 and R^5

optionally form, together with a carbon atom bonded thereto, a ring optionally having substituent(s),

m and n

are each an integer of not less than 1, wherein m+n=3 to 8,

C^1 is a carbon atom,

Z is a hydrogen atom, an alkyl group optionally having substituent(s) or an aryl group optionally having substituent(s),

X^1 is a carbon atom, CH, an oxygen atom, a nitrogen atom or a sulfur atom, and

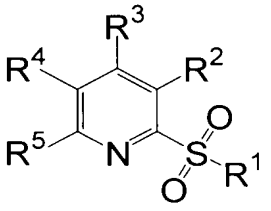
X^2 is a carbon atom, CH, an oxygen atom, a nitrogen atom or a sulfur atom,

wherein at least one of X^1 and X^2 is an oxygen atom, a nitrogen atom or a sulfur atom, when X^1 or X^2 is a carbon atom, CH or a nitrogen atom, Y^1 and Y^2 are each a hydrogen atom, a halogen atom, an alkyl group optionally having substituent(s), an aryl group optionally having substituent(s), an alkoxyl group optionally having substituent(s), an aryloxy group optionally having substituent(s), an acyloxy group optionally having substituent(s), an alkylthio group optionally having substituent(s), an arylthio group optionally having substituent(s), an acylthio group optionally having substituent(s), a protected amino group optionally having substituent(s), a nitro group, a cyano group, an acyl group optionally having substituent(s), an alkoxycarbonyl group optionally having substituent(s), a carbamoyl group optionally having substituent(s) or a sulfonyl group optionally having substituent(s), and

Y^1, Y^2 or Z

is optionally bonded to Y^1 or Y^2, which X^1 or X^2 adjacent to X^1, X^2 or C^1 bonded to Y^1, Y^2 or Z has, to form a double bond or a ring structure, or when X^1 or X^2 is a carbon atom, Y^1 or Y^2 shows an oxygen atom and is optionally bonded to X^1 or X^2 via a double bond,

which comprises reacting a 2-sulfonylpyridine derivative represented by the formula (I)

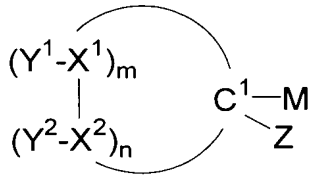


(I)

wherein

R^1 is an alkyl group optionally having substituent(s) or an aryl group optionally having substituent(s), and

with an organometallic compound represented by the formula (II)



(I I)

wherein

M is an atom of an element belonging to Group 1, Group 2, Group 12 or Group 13 of the periodic table except a hydrogen atom.

Claim 4 (Previously Presented): The production method of claim 3, wherein the organometallic compound (II) has an aromatic heterocycle.

Claim 5 (Previously Presented): The production method of claim 4, wherein the aromatic heterocycle is a pyridine ring, a pyrimidine ring, a pyridazine ring, a pyrazine ring, a thiophene ring, a furan ring, a pyrrole ring, an imidazole ring, a pyrazole ring, a thiazole ring, an oxazole ring or an isoxazole ring.

Claim 6 (Currently Amended): The production method of ~~any of claims 3 to 5~~ claim 3, wherein, in the formula (II), M is a lithium atom, a sodium atom, a potassium atom, a magnesium atom, a calcium atom, a zinc atom, a boron atom or an aluminum atom.

Claim 7 (Currently Amended): The production method of ~~any of claims 3 to 5~~ claim 3, wherein, in the formula (II), M is a lithium atom or a magnesium atom.

Claim 8 (Previously Amended): The production method of claim 5, wherein the aromatic heterocyclic is a pyridine ring.

Claim 9 (Previously Presented): The production method of claim 6, wherein the aromatic heterocyclic is a pyridine ring.

Claim 10 (Previously Presented): The production method of claim 7, wherein the aromatic heterocyclic is a pyridine ring.